

■ **Programmable Process Instrument Model PM 9000**

Highlights

- DIN rail mounting
- Especially qualified for installation in flat wall case and terminal box
- At standard a lot of measuring ranges for different sensors
- Varied connections at digital IO's from SPS (also Mini-SPS)
- 10 parameter sets for a quickly configuration
- Measuring during parameter setup
- Application as a nominal value transmitter

Standard functions

Measuring ranges

Analoge input ranges

(16 bit, 5 measurements per sec, user configurable)

- Voltage : +/-20.00 V, +/-2.000 V, +/-200.0 mV, +/-20.00 mV
- Current : +/-20.00 mA, 0/4.00 to 20.00 mA
- Angle potentiometer : 0 to 100.0%
- Resistance : 0 to 1.000k Ω
- DMS : 1,5/2/2,5/3/3,3 mV/V +/-100.0 % (4-wire)

(fixed measuring ranges)

- Pt100 : -200.0 to +800.0 $^{\circ}$ C (2-, 4- wire)
- FeCuNi (J) : -100 to +800 $^{\circ}$ C
- NiCrNi (K) : -100 to 1300 $^{\circ}$ C
- PtRhPt (S) : 0 to 1750 $^{\circ}$ C
- Temperature compensation: internal, constant or without

Digital input ranges

(input voltage 24 - 60 V, isolated)

Counter (24 bit, to scale)

(display range +99999 to -9999)

- Incremental : 1-, 2-, 4- fold to 2 kHz
- Impulse : max. 2 kHz alternatively gate, direction, re-set

Time measuring

- Frequency : 0.01 Hz to 10 kHz
- Time : to 9999.9 s
- Cycle : to 9999.9 s
- Pulse duration : to 9999.9 s
- Impulse/min : 0 to 99999



- Impulse/h : 0 to 99999

Special function

- Nominal value transmitter

Alarm outputs

- 2 alarms with solid-state relays (24 VDC, 200 mA, short-proof) supplying about the main power supply
- Programmable functions: alarm point, hysteresis, switching characteristics, rise time - and fall time delay data source: direct input -, mean -, peak -, valley value
- Direct connection to SPS

Analog output

- Free scaling, isolated, 14 Bit
- Voltage : 0 to 10 V, max. 10 mA
- Current : 0/4 to 20 mA, 500 Ω burden
- Data source : direct input -, mean -, peak -, valley value
- Error indication at current output
Sensor break : > 22 mA
Error : < 2 mA

Synchron serial interface

- Isolated
- Connection of separate displays with serial input
- Connection to SPS resp. IO-cards
- Measured value transmitting
- Control of transfer rate via SPS
- Minimum IO-expense at the SPS

Parameter sets

The PM 9000 is provided with 10 parameter sets. Each parameter sets contains all adjustments incl. 10 point linearisation. So the PM 9000 can be lay on the stock

for 10 several fields of applications. If required the wished parameter set is be adjust and the instruments gets in the operation mode.

External button connection

- Isolated
- Supplying about the main power supply
- Connection to SPS for parameter setup

Display

- 5 decades, 7 segment, 7,6 mm
- Display range +99999 to -9999
- Programmable decimal point
- Data source: direct input -, mean -, peak -, valley value
- Last digit: in 1, 2, 5 or 10 steps

Software functions

- User scaling
- Adjustable digital filter of 1th order
- Peak and valley detection
- Userdefined linearization up to 10 points
- Taring
- Automatic reset of peak and valley detection
- Display of temperature in °C, °F or K
- Setting of parameters during measurement

General datas

Power supply : 18 .. 36 VDC,
 Power consumption : max. 3 W*
 Mounting : DIN rail 35 mm
 DIN EN 50022 - 35 x 7,5
 DIN EN 50022 - 35 x 15
 32 mm G-rail

DIN EN 50035 - G - 32
 EMV : in conform with 89/336/EWG
 Operating temperature
 standard : 0 to + 50 °C
 optional : -25 to + 75 °C
 Storage temperature : -25 to +85 °C

Options

- Extended temperature range -20 to +75 °C
- RS485-interface isolated, to 19200 baud
- Data memory

Accessories

- Power relay for 1 or 2 limit indications
- Seperate synchron serial display (several colours)

Ordering informations

- PM 9000/0 Operating temperature 0 to 50 °C
- PM 9000/1 Operating temperature -20 to +70 °C

*All components and options active.

Dimensions

